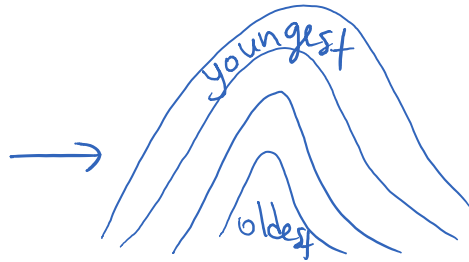


Folds

- always occur at converging boundaries

1. Anticline

Cross-section
view



"ant hill"

← compression

2. Syncline

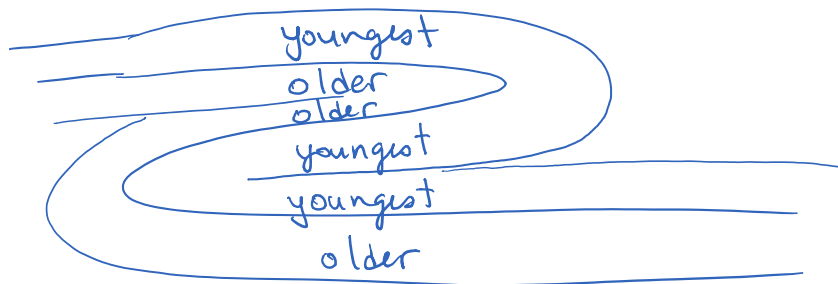


"smile"

← compression

3. Overturned Fold

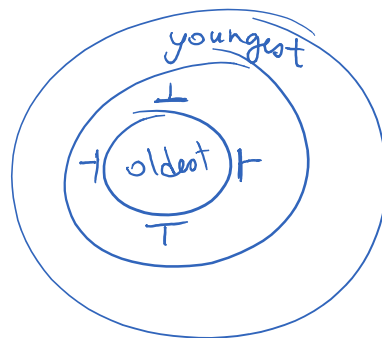
compression →



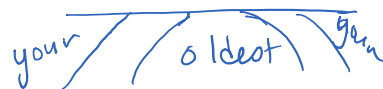
←

4. Dome (eroded flat)

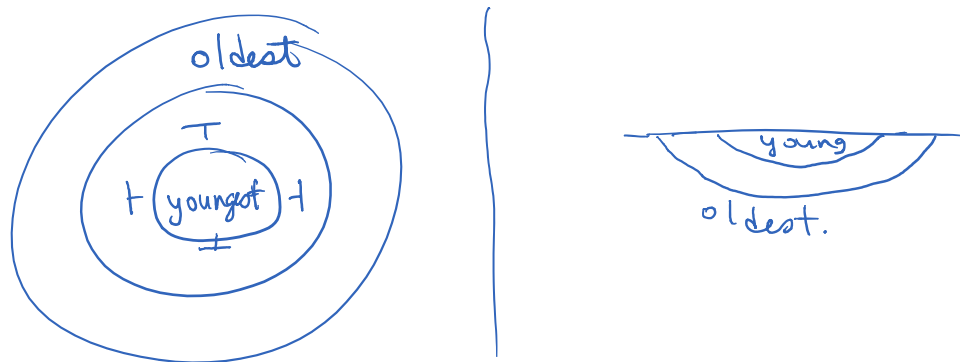
"map or
aerial
view"



Cross
section
(eroded)






5. Basin (eroded flat)



Which Way is Up?

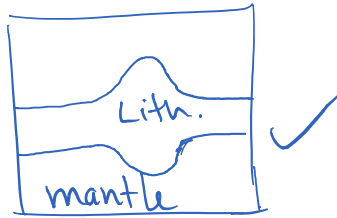
When a layer forms, one side is the up (or top) side. The layers can be overturned and eroded so that the top layer is now older than the layers under it. Then we need to realize that the layer is upside-down:

- ripple marks 
- raindrop prints
- shells - tend to settle open side down 
- mud cracks are widest at top 
- graded bedding (heaviest at bottom)

Isostasy - the tendency of lithospheric masses to float at elevations consistent with their relative densities.

- ex mountains erode, lithosphere rises up
- ex glacier forms, lithosphere sinks a bit.

The following are in isostatic equilibrium:



This one is not in equilibrium:

